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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/336,741	06/21/1999	SHERMAN CHING	X/P6396US0	8007

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EXAMINER
HEWITT II, CALVIN L

ART UNIT	PAPER NUMBER
3621	

DATE MAILED: 03/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/336,741	CHING, SHERMAN	
	Examiner	Art Unit	
	Calvin L Hewitt II	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 December 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Status of Claims

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/21/01 has been entered.

2. Claims 1-48 have been examined.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-48 rejected under 35 U.S.C. 103(a) as being unpatentable over Norris, U.S. Patent No. 5,870,721 in view of Fraser et al., U.S. 5,995,947 and Hartman et al. U.S. Patent No. 5,960,411.

As per claims 1-47, Norris teaches a loan processing system that:

- allows applicants to input data into a system (figure 1; column 2, lines 51-65; column/line 7/55-8/10)
- sends the data (i.e. completed application) over a communications network (column/line 7/55-8/10)
- allows lenders to view and analyze the data in order to make a decision on the application (column/line 6/21-7/4; column/line 7/55-8/10; column 8, lines 10-54)
- provides an applicant with the status or an assessment of the application (column/line 6/21-7/4; column/line 7/55-8/10; column 8, lines 28-53)
- display means (figure 1, item 34; column 6, lines 46-67; column/line 7/55-8/10)
- obtains additional information from external sources purposes of analyzing the applicant's data (figure 1, items 14 and 16; column 4, lines 48-56; column 6, lines 46-51; column 7, lines 55-65)
- uses a neural network to render a decision as to whether or not to grant a loan to an applicant (column 6, lines 20-50; column 8, lines 10-60)
- allows an application to be rejected based on partial analysis (column 8, lines 1-10)

Norris teaches that an applicant can request assistance (column 7, lines 46-54) and that a lender can assist an applicant (column 8, lines 15-22). Therefore, it would have been at least obvious for one of ordinary skill of the art to allow the lender providing assistance to view the inputted data in order to better help the applicant. Also, as Norris teaches that his system can be implemented on a PC it would have been obvious to provide software so that it can be run from home or office, or loaded onto computer memory to allow for public access to the system (e.g. kiosk) (figures 2 and 3; column 8, lines 10-21).

Norris does not explicitly teach forms, remote display means and form sequencing and data rules. In addition, Norris does not disclose bidding. Hartman et al. teach a data entry system consisting of a plurality of electronic forms with data control (abstract; figures 1A-2, 8A-C). Hartman et al. also teach a method for allowing a user to complete an application through the optimization of electronic form processing, by providing a sequence of forms to a user, where the requesting of unnecessary information in these forms is avoided (figures 1C, 3, 4, figures 8A-C; column 2, lines 59-67; column 4, lines 35-58; column 5, lines 8-26; column 7, lines 3-23; column 9, lines 8-53). In particular, Hartman et al., disclose, after completing a first form, the system constructing and presenting second, and subsequent forms, on the basis of information provided by an applicant in the first form and an applicant sending these forms to a remote system (column 9, lines 25-53). Regarding unnecessary information, neither

Norris nor Hartman in their respective application processes require users to input that is unrelated to the application. While, Fraser et al. teach an interactive loan trading system where a loan application can be modified ('947, column 3, lines 46-53; column 8, lines 24-28) and is accessible and selectively presented on remote lender computers in order for lenders to select, review and bid on loan applications ('947, figure 1; column 2, lines 21-31; column 7, lines 5-20; column 12, lines 26-67; column 13, lines 3-8 and 34-48). Fraser et al. also allow bids to be accepted (column 13, lines 42-47). Therefore, it would have been obvious to combine the teachings of Norris, Fraser et al. and Hartman et al. The motivation is as follows:

As in the real world, [electronic] forms are useful for data entry in order to except, present and if necessary print data in an efficient and organized manner. Therefore, it would have been obvious to present successive forms for data entry if a large amount of data is expected on the part of a user ('411, column 9, lines 7-53). Hartman et al. teach a method where a server provides a user with an electronic form with redundant information is already filled in ('411, column 7, lines 3-22). Also in case of errors, "uneditable" text fields are provided which prevent the inadvertent changing of correct user data (column 9, lines 36-53). Therefore, by implementing the system of Norris with these features allows for more efficient and accurate loan form processing. Further, the neural network system of Norris would have been an obvious addition to the teaching of Fraser

et al. as lenders can use machine learning to use its own business rules for application acceptance in order to more efficiently select desirable or profitable loan profiles or produce credit metrics ('947, column 7, lines 7-23; column 12, lines 22-26). The system of Norris asks questions of an applicant for purposes of gathering data in order to make a decision, it would have been obvious for a neural network designer to modify the question asking procedure for purposes of improving neural network analysis ('721, column 6, lines 3-48; column/line 7/66-8/54) and/or reduce the number of inconclusive judgments ('721, column 8, lines 22-28).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (703) 308-8057. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James P. Trammell, can be reached at (703) 305-9768.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

c/o Technology Center 2100

Washington, D.C. 20231

or faxed to:

(703) 746-7239 (for formal communications intended for entry),

(703) 746-7238 (for after-final communications),

or:

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Calvin Loyd Hewitt II

March 3, 2003

JAMES P. TRAMMELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600